CLAIMS

What is claimed is:

1. A method for transferring data in a wireless communication system, the method comprising:

transmitting data over a particular channel from a transmitter to a plurality of receivers;

receiving the particular channel at the plurality of receivers;

each of the receivers sending power control information to the transmitter based on a measured reception quality and a reception quality requirements of each receiver;

the transmitter using the power control information from each receiver and adjusting a transmission power level of the particular channel so that if any receiver requires an increase in the transmission power level to meet that receiver quality requirement, the transmission power level is increase and if all receivers exceed their quality requirement, the transmission power level is decreased.

2. The method of claim 1 wherein the particular channel is a shared channel.

3. The method of claim 1 wherein the particular channel is a high speed shared channel.

4. The method of claim 1 wherein the power control information send by each receiver is transmit power control commands.

5. The method of claim 1 wherein the measured reception quality is a signal to interference ratio and the receiver quality requirement is a target signal to interference ratio.

6. The method of claim 1 wherein the measured reception quality is a reception quality of the particular channel.

7. The method of claim 1 wherein for at least one of the receivers, the particular channel has an associated dedicated channel and the measured reception quality is of the associated dedicated channel.

8. The method of claim 1 wherein for each of the receivers, the particular channel has an associated dedicated channel and the measured reception quality is of the associated dedicated channel.

9. A base station for transferring data over a particular channel to multiple users, the base station comprising:

a transmitter and an antenna for producing a particular channel for transmission to a plurality of users simultaneously;

a power control receiver for receiving power control information from each of the users; and

a transmit power control device for using the power control information from each of the plurality of users and adjusting a transmission power level of an amplifier of the particular channel so that if any user requires an increase in the transmission power level, the transmission power level is increase and if all users exceed their quality requirement, the transmission power level is decreased.

10. The base station of claim 9 wherein the particular channel is a shared channel.

11. The base station of claim 9 wherein the particular channel is a high speed shared channel.

12. The base station of claim 9 wherein the power control information received from each user is transmit power control commands.

13. The base station of claim 9 wherein the base station establishes for each user a dedicated channel associated with the particular channel.

14. The base station of claim 9 wherein the base station has for at least one of the users a dedicated channel associated with the particular channel.

15. A base station for transferring data over a particular channel to multiple users, the base station comprising:

means for producing a particular channel for transmission to a plurality of users simultaneously;

means for receiving power control information from each of the users; and

means for using the power control information from each of the plurality of users and adjusting a transmission power level of an amplifier of the particular channel so that if any user requires an increase in the transmission power level, the transmission power level is increase and if all users exceed their quality requirement, the transmission power level is decreased.

16. The base station of claim 15 wherein the particular channel is a shared channel.

17. The base station of claim 15 wherein the particular channel is a high speed shared channel.

18. The base station of claim 15 wherein the power control information received from each user is transmit power control commands.

19. The base station of claim 15 wherein the base station establishes for each user a dedicated channel associated with the particular channel.

20. The base station of claim 15 wherein the base station has for at least one of the users a dedicated channel associated with the particular channel.

21. A wireless transmit/receive unit (WTRU) for receiving data over a particular channel, the WTRU comprising:

a receiver for receiving the particular channel, the particular channel being received by a plurality of WTRUs simultaneously;

a power control information generator for sending power control information based on a measured reception quality and a reception quality requirements of the WTRU; and

wherein the particular channel has a transmission power level set so that if any of the plurality of WTRUs requires an increase in the transmission power level to meet that reception quality requirement, the transmission power level is increased and if all of the plurality of WTRUs fall below their quality requirement, the transmission power level is decreased.

22. The WTRU of claim 21 wherein the measured reception quality is a signal to interference ratio and the reception quality requirement is a target signal to interference ratio.

23. The WTRU of claim 21 wherein the measured reception quality is a reception quality of the particular channel.

24. The WTRU of claim 21 further comprising a dedicated channel receiver and wherein the measured reception quality is of the dedicated channel.

25. A wireless transmit/receive unit (WTRU) for receiving data over a particular channel, the WTRU comprising:

means for receiving the particular channel, the particular channel being received by a plurality of WTRUs simultaneously;

means for sending power control information based on a measured reception quality and a reception quality requirements of the WTRU; and

wherein the particular channel has a transmission power level set so that if any of the plurality of WTRUs requires an increase in the transmission power level to meet that reception quality requirement, the transmission power level is increased and if all of the plurality of WTRUs fall below their quality requirement, the transmission power level is decreased.

26. The WTRU of claim 25 wherein the measured reception quality is a signal to interference ratio and the reception quality requirement is a target signal to interference ratio.

27. The WTRU of claim 25 wherein the measured reception quality is a reception quality of the particular channel.

28. The WTRU of claim 25 further comprising means for receiving a dedicated channel and wherein the measured reception quality is of the dedicated channel.